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EXAMINER

HIRL, JOSEPH P

ART UNIT

PAPER NUMBER

2121

DATE MAILED: 01/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/663,325

Applicant(s)

WILLIAMS ET AL.

Examiner

Joseph P. Hirl

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 15 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 15 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to an AMENDMENT entered October 17, 2003 for the patent application 09/663,325 filed on September 15, 2000.
2. The First Office Action of April 17, 2003 is fully incorporated into this Final Office Action by reference.
3. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.
4. Examiner's Opinion: The concept of displaying options with connectivity is very generic. Claims written around such concept will be very vulnerable to prior art from many directions. This is especially true when Paragraph 3 above is applied as the Examiner is so obligated. The prior art of Thurlow et al (not used; U. S. Patent 6,057,841) is an example.

Response to Arguments

5. The objection to the Information Disclosure Statement is withdrawn.
6. Applicant's arguments filed on October 17, 2003 related to Claims 1-20 have been fully considered but are not persuasive.

In reference to Applicant's argument:

With respect to the independent claim 1, rejected under 35 U.S.C. §102(e) as being anticipated by Mukherjee, the Examiner asserts that "Mukherjee anticipates a processor (Mukherjee, col 19, lines 34-35), a memory and a display both operatively coupled to said processor (Mukherjee, col 19, lines 34-37); a plurality of rule steps stored within said memory (Mukherjee, col 19, lines 34-37); means for graphically depicting said plurality of rule steps stored within said memory as an arrangement on said display (Mukherjee, col 19, lines 34-52; col 2, lines 19-38); means for selecting at least one of said graphically depicted rule steps from said arrangement for visually creating a custom rule on said display (Mukherjee, col 2, lines 19-38; Examiner's Note (EN): the form of Mukherjee is a representation of the rules and the specific characteristics of the form represent rule steps)."

In contrast to the Examiner's Note, Mukherjee defines a form as a standardized document (Column 1, lines 10 through 12) and not as a representation of rules. Instead, Mukherjee provides a plurality of prompts each of which is associated with at least one of the logic-based rules in the knowledge base (Column 20, lines 48 through 50) for prompting users for information and generating forms based on predefined rules processing user input information. There is no teaching or suggestion in Mukherjee (or in any of the prior art of record) of creating custom rules from rule steps as original claim 1 particularly points out and distinctly claims.

Thus, in contrast to the Examiner's assertion, Mukherjee clearly does not anticipate (nor render obvious) graphically depicting rule steps as an arrangement and selecting at least one of said graphically depicted rule steps from said arrangement for visually creating a custom rule on said display as claim 1 particularly points out and distinctly claims. In stark contrast, Mukherjee provides a plurality of prompts each of which is associated with at least one of the predefined logic-based rules in the knowledge base (Column 20, lines 48 through 50) for prompting users for information and generating forms based on the predefined logic-based rules processing the user input information.

Examiner's response:

Paragraph 3 above applies. To one of ordinary skill in the art, a rule is a statement that can be used to verify premises and to enable a conclusion to be drawn. For sure, a form is a manifestation of rules and using the guidance from Paragraph 3 above, the specific characteristics of the form represent rule steps or applications. It is very important for the applicant to fully understand that the Examiner has full latitude to

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interpret each claim in the broadest reasonable sense and has the obligation to do so. It is from the broad perspective facilitated by the claims that the Examiner has applied Mukherjee. Further, there is nothing new or novel concerning operand and operation that is not represented by an "if-then" rule.

In reference to Applicant's argument:

Additionally, applicant recognizes the problems associated with the teachings of the known prior art (including Mukherjee) and directs the reader's attention to these problems in the back ground of the present invention (please see at least page 4, lines 7 through 11) wherein applicant recognizes that "some type of wizard interface may be employed to ask questions and then write code from answers. However, this is; still problematic in that text has to be parsed in order for it to be converted into symbols that are then sent to an interpreter or compiler in order to obtain a resultant rule and the user may still have to understand the way previous rules where written."

Examiner's response:

Mukherjee teaches in the Abstract at lines 1-10:

A system and method includes a rule-based expert system that uses high-level rules for determining what graphical interface features should be displayed to a user. The rules can be written in a language such as PROLOG and used in an inference engine to drive the graphical user interface. The rules can be changed without recoding and testing of computer software, and without specialized computer software knowledge. Consequently, people other than programmers can customize and change a graphical user interface easily and without errors.

In reference to Applicant's argument:

Notwithstanding the foregoing, undersigned has amended claim I hereinabove in order to facilitate a resolution of this case and to further emphasize unique features of the claimed invention of this application which provide further contrasts from prior art teachings. Specifically, claim I has been amended hereinabove and now reads as follows: A custom rule system for creating custom rules, said custom rule system comprising in combination: a processor, a memory and a display both operatively coupled to said processor; a plurality of operand and operation rule steps stored within said memory; means for displaying to a user graphical depictions of said plurality of operand and operation rule steps stored within said memory as an arrangement on said display such that said arrangement is comprised of a plurality of individual graphical operand and operation depictions each corresponding to at least one of said operand and operation rule steps; means for a user to select and interconnect at least two of said plurality of individual graphical operand and operation depictions for creating a custom rule comprised of operand and operation rule steps corresponding to the user selection of the at least two of said plurality of individual graphical operand and operation depictions.

Examiner's response:

A form is a manifestation of rules and using the guidance from Paragraph 3 above, the specific characteristics of the form represent rule steps or applications of operand and operation rule steps. Operand and operation correspond, respectively, to the "if" and "then" parts of an "if-then" rule. Selection of a rule will cause an interconnection to an appropriate portion of a form. Examiner again references Paragraph 3 above and the associated obligation.

In reference to Applicant's argument:

Specifically, Mukherjee fails to teach or suggest a plurality of operand and operation rule steps stored within said memory and means for displaying to a user graphical depictions of said plurality of operand and operation rule steps stored within said memory as an arrangement on said display such that said arrangement is comprised of a plurality of individual graphical operand and operation depictions each corresponding to at least one of said operand and operation rule steps and means for a user to select and interconnect at least two of said plurality of individual graphical operand and operation depictions for creating a custom rule comprised operand and operation rule steps corresponding to the user selection of the at least two of said plurality of individual graphical operand and operation depictions.

In stark contrast, Mukherjee teaches predefined logic-based rules stored in the knowledge base and a screen displayed to a user having a plurality of prompts each of which is associated with at least one of the predefined logic-based rules in the knowledge base for prompting users for information and generating forms based on the predefined logic-based rules processing user input information. Please see abstract and Column 20, lines 32 through 50.

Examiner's response:

Paragraph 3 applies. Mukherjee teaches (Abstract and Summary of Invention) rules stored in memory, displayed graphically to the user to such that when an "if" is activated, a "then" reflecting various options is proposed and a custom result follows. Several rules or more can be selected. There is nothing in the applicant's reference that counters the Examiner's view. The problem is just exactly that. The Examiner's perspective is provided by the written claims and Paragraph 3 above.

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In reference to Applicant's argument:

With respect to the independent claim 4, the Examiner asserts that "Mukherjee anticipates a database comprised of a multiplicity of rule steps, each said rule step having specific executable code associated therewith (Mukherjee, col 2, lines 19-62); a computer operatively coupled to said database and including a display for graphically depicting said rule steps in an array and for providing a graphical window (Mukherjee, col 19, lines 34-52); means for interacting with said array to select and place said graphically depicted rule steps from said array to said graphical window for graphical display (Mukherjee, col 19, lines 34-52); means for interconnecting said graphically displayed rule steps within said graphical window for creating a custom rule (Mukherjee, col 19, lines 63-67; EN: linking of the prompts is a manifestation of rule interconnection)."

In stark contrast to the Examiner's assertion, and as noted hereinabove, Mukherjee clearly fails to teach or suggest a multiplicity of rule steps, each said rule step having specific executable code associated therewith; a computer operatively coupled to said database and including a display for graphically depicting said rule steps in an array and for providing a graphical window; means for interacting with said array to select and place said graphically depicted rule steps from said array to said graphical window for graphical display and; means for interconnecting said graphically displayed rule steps within said graphical window for creating a custom rule as claim 4 particularly point outs and distinctly claims.

Instead, Mukherjee provides a plurality of prompts each of which is associated with at least one of the predefined logic-based rules in a knowledge base for prompting users for information and generating forms based on the predefined logic-based rules processing user input information. Please see abstract and column 20, lines 48 through 50. There is no teaching or suggestion in Mukherjee (or in any of the prior art of record) of creating custom rules from rule steps as claim 4 particularly point outs and distinctly claims.

Examiner's response:

As stated above, a form is a manifestation of rules and using the guidance from Paragraph 3 above, the specific characteristics of the form represent rule steps or applications. Multiplicity of rule steps follows from the applicable form. Mukherjee fully teaches a computer system as identified in Figure 1. Applicant's computer system is generic and embodied as part of Mukherjee. Arrays are generic to databases. The graphical depiction of rule steps is the form itself. The creation of the custom rule is nothing more than the user response. The applicant's reference merely cites the Examiner's view that Mukherjee anticipates the applicant's disclosure.

In reference to Applicant's argument:

Notwithstanding the foregoing, undersigned has amended claim 4 hereinabove in order to facilitate a resolution of this case and to further emphasize unique features of the claimed invention of this application which provide further contrasts from prior art teachings. Specifically, claim 4 has been amended hereinabove and now reads as follows: A custom rule system for creating custom rules, said system comprising in combination: a database comprised of a multiplicity of operand and operation rule steps, each said rule step having specific executable code associated therewith; a computer operatively coupled to said database and including a display for displaying to a user graphical depictions of said multiplicity of operand and operation rule steps stored within said database as an array of a multiplicity of individual graphical operand and operation depictions displayed within a first window on said display and each corresponding to at least one of said multiplicity of operand and operation rule steps; means for displaying a rules window on said display, means for a user to interface with said array displayed in said first window to select and place a plurality of said multiplicity of individual graphical operand and operation depictions from said array to said rules window for graphical display; and means for interconnecting said plurality of said multiplicity of individual graphical operand and operation depictions displayed in said rules window for creating a custom rule.

Upon a careful reading of the patent to Mukherjee these amended teachings and requirements are clearly neither anticipated (nor rendered obvious) by the disclosure of Mukherjee. In addition, there is no teaching in any of the prior art of record to suggest providing Mukherjee with these teaching and requirements.

Specifically, Mukherjee fails to teach or suggest at least the following claimed elements:

- 1) a computer operatively coupled to said database and including a display for displaying to a user graphical depictions of said multiplicity of operand and operation rule steps stored within said database as an array of a multiplicity of individual graphical operand and operation depictions displayed within a first window on said display and each corresponding to at least one of said multiplicity of operand and operation rule steps;
- 2) means for displaying a rules window on said display;
- 3) means for a user to interface with said array displayed in said first window to select and place a plurality of said multiplicity of individual graphical operand and operation depictions from said array to said rules window for graphical display; and
- 4) means for interconnecting said plurality of said multiplicity of individual graphical operand and operation depictions displayed in said rules window for creating a custom rule.

In stark contrast, Mukherjee teaches predefined logic-based rules stored in the knowledge base and a screen displayed to a user having a plurality of prompts each of which is associated with at least one of the predefined logic-based rules in the knowledge base for prompting users for information and generating forms based on the predefined logic-based rules processing user input information. Please see abstract and Column 20, lines 32 through 50.

Examiner's response:

As stated above, a form is a manifestation of rules and using the guidance from Paragraph 3 above, the specific characteristics of the form represent rule steps or applications. Multiplicity of rule steps follows from the applicable form. Mukherjee fully teaches a computer system as identified in Figure 1. Applicant's computer system is

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generic and embodied as part of Mukherjee. Arrays are generic to databases. The graphical depiction of rule steps is the form itself. The creation of the custom rule is nothing more than the user response. The applicant's reference merely cites the Examiner's view that Mukherjee anticipates the applicant's disclosure.

In reference to Applicant's argument:

With respect to the independent claim 9, the Examiner asserts that "Mukherjee anticipates an arrangement of graphically depicted rule steps, each said graphically depicted rule step having assembled code associated therewith and stored within a database (Mukherjee, col 19, lines 3452); means for individually selecting said graphically depicted rules steps from said arrangement and disposing said selected rules in a graphical window such that said selected rules are arranged in a substantially columnar format (Mukherjee, col 2, lines 19-38; Fig. 3A); means for graphically interconnecting said selected rule steps disposed in said graphical window (Mukherjee, col 2, lines 39-62; col 19, lines 62-67), and means for storing said graphically interconnected selected rule steps disposed in said graphical window as a custom rule to be employed for decision making in an expert system (Mukherjee, col 2, lines 39-62; col 19, lines 62-67)."

In stark contrast to the Examiner's assertion, Mukherjee at column 19, lines 34-52 teaches "displaying on a computer device a form" which is defined at column 2 line 10 as a document and further teaches that the form comprises "a first plurality of prompts" and "receiving a response corresponding to one of the first plurality of prompts" and "converting the response into a factual insertion in a rule based driven knowledge base comprising rules written in a declarative language" and "executing the rules ... to test for a condition, and in response to the condition being satisfied changing the appearance of the form to display a new prompt. . ."

Thus, Mukherjee clearly fails to teach or, suggest an arrangement of graphically depicted rule steps, each said graphically depicted rule step having assembled code associated therewith and stored within a database; means for individually selecting said graphically depicted rules steps from said arrangement and disposing said selected rules in a graphical window such that said selected rules are arranged in a substantially columnar format; means for graphically interconnecting said selected rule steps disposed in said graphical window, and means for storing said graphically interconnected selected rule steps disposed in said graphical window as a custom rule to be employed for decision making in an expert system as claim 9 particularly point outs and distinctly claims.

Instead, Mukherjee provides displaying on a computer device a form defined as a document and a first plurality of prompts and means for receiving a response corresponding to one of the first plurality of prompts and converting the response into a factual insertion in a rule based driven knowledge base comprising rules written in a declarative language and executing the rules to test for a condition, and in response to the condition being satisfied changing the appearance of the form to display a new prompt,, Further, Mukherjee teaches that the plurality of prompts are each associated with at least one of the predefined logic-based rules in a knowledge base for prompting users for information and generating forms based on the predefined logic based rules processing user input information.. Please see column 19, lines 34 through 52, column 2 line 10, and the abstract. Hence, there is clearly no teaching or suggestion in Mukherjee (or in any of the prior art of record) of creating custom rules from rule steps as claim 9 particularly point outs and distinctly claims.

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Notwithstanding the foregoing, undersigned has amended claim 9 hereinabove in order to facilitate a resolution of this case and to further emphasize unique features of the claimed invention of this application which provide further contrasts from prior art teachings. Specifically, claim 9 has been amended hereinabove and now reads as follows: A custom rule system for creating custom rules, said system comprising in combination: a database comprised of a multiplicity of operand and operation rule steps, each said rule step having specific executable code associated therewith; a computer operatively coupled to said database and including a display for displaying to a user graphical depictions of said multiplicity of operand and operation rule steps stored within said database as an arrangement of a multiplicity of individual graphical operand and operation depictions displayed in a first window on said display and each corresponding to at least one of said multiplicity of operand and operation rule steps; means for displaying a rules window on said display; means for individually selecting, dragging, and dropping a plurality of said multiplicity of individual graphical operand and operation depictions from said first window to said rules window; means for graphically interconnecting said individual graphical operand and operation depictions in said rules window, and means for storing said graphically interconnected selected individual graphical operand and operation depictions in said rules window as a custom rule to be employed for decision making in an expert system.

Upon a careful reading of the patent to Mukherjee these amended teachings and requirements are clearly neither anticipated (nor rendered obvious) by the disclosure of Mukherjee. In addition, there is no teaching in any of the prior art of record to suggest providing Mukherjee with these teaching and requirements.

Specifically, Mukherjee fails to teach or suggest at least the following claimed elements:

- 1) a display for displaying to a user graphical depictions of said multiplicity of operand and operation rule steps stored within said database as an arrangement of a multiplicity of individual graphical operand and operation depictions displayed in a first window on said display and each corresponding to at least one of said multiplicity of operand and operation rule steps; means for displaying a rules window on said display;
- 2) means for individually selecting, dragging, and dropping a plurality of said multiplicity of individual graphical operand and operation depictions from said first window to said rules window ;
- 3) means for graphically interconnecting said individual graphical operand and operation depictions in said rules window, and means for storing said graphically interconnected selected individual graphical operand and operation depictions in said rules window as a custom rule to be employed for decision making in an expert system.

In stark contrast, Mukherjee teaches predefined logic-based rules stored in the knowledge base and a screen displayed to a user having a plurality of prompts each of which is associated with at least one of the predefined logic-based rules in the knowledge base for prompting users for information and generating forms based on the predefined logic-based rules processing user input information. Please see abstract and Column 20, lines 32 through 50.

Examiner's response:

As stated above, a form is a manifestation of rules and using the guidance from Paragraph 3 above, the specific characteristics of the form represent rule steps or applications. Multiplicity of rule steps follows from the applicable form. Mukherjee fully teaches a computer system as identified in Figure 1. Applicant's computer system is generic and embodied as part of Mukherjee. Rules are graphically displayed in a static

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or dynamic form on a display. Rules and logic are axiomatic. The graphical depiction of rule steps is the form itself. Since a rule can be instantaneous, the creation of the custom rule is nothing more than the direct user response. The applicant's reference merely cites the Examiner's view that Mukherjee anticipates the applicant's disclosure.

In reference to Applicant's argument:

Specifically, and referring to column 2, Mukherjee includes "a rule-based expert system and method that uses high-level rules for determining what graphical interface features should be displayed to a user" and "Consequently, people other than programmers can customize and change a graphical user interface easily and without errors." Please see column 2, lines 25 through 35. Additionally, Mukherjee teaches that "Certain embodiments of the present invention include a scanner and related software that captures data fields from existing paper forms; a database for storing field definitions and their relationships together with rules for determining which user interface features to display at a particular point in a data entry sequence; an inference engine for executing the rules; a graphical user interface component that provides the user with dynamically generated screen configurations based on execution of the rules (which are fired based on inferences drawn from data the user has entered); and a printing component that generates paper and/or electronic forms based on the user's inputs and the execution of the rules. Please see column 2, lines 39 through 51.

Thus, Mukherjee teaches "a database for storing rules for determining which user interface features to display at a particular point in a data entry sequence" not storing individual rule steps comprised of executable code within a database coupled to a computer as claim 15 particularly points out and distinctly claims. Additionally, Mukherjee teaches an "inference engine for executing the rules and a graphical user interface component that provides the user with dynamically generated screen configurations based on execution of the rules (which are fired based on inferences drawn from data the user has entered)" not depicting said rules steps on a display of said computer as a graphical arrangement of icons as claim 15 particularly points out and distinctly claims. Furthermore, Mukherjee teaches "a printing component that generates paper and/or electronic forms based on the user's inputs and the execution of the rules" not creating a custom rule by interfacing with said graphical arrangement of icons as claim 15 particularly points out and distinctly claims.

Notwithstanding the foregoing, undersigned has amended claim 15 hereinabove in order to facilitate a resolution of this case and to further emphasize unique features of the claimed invention of this application which provide further contrasts from prior art teachings.

Specifically, claim 15 has been amended hereinabove and now reads as follows: A method for creating custom rules, the steps including: storing individual operand and operation rule steps comprised of executable code within a database coupled to a computer; depicting said operand and operation rules steps on a display of said computer as a graphical arrangement of operand and operation icons; creating a user defined custom rule by interfacing with said graphical arrangement of operand and operation icons for selecting and placing a plurality of said operand and operation icons from said graphical arrangement to a graphical window on said display and interconnecting said icons placed within said graphical window

Examiner's response:

Paragraph 3 applies. Rule steps are also rules. Computers and executable code are generic. Graphic displays – dynamic screen configurations- are not novel. A form is a manifestation of rules and using the guidance from Paragraph 3 above, the specific characteristics of the form represent rule steps or applications of operand and operation rule steps which is synonymous to creating custom rules by interfacing with graphical arrangement of icons.

In reference to Applicant's argument:

Specifically, claim 18 has been amended hereinabove and now reads as follows: A method for creating custom rules, the steps including: selecting an asset for a custom rule; defining input value steps to be used in the custom rule; each said input value step including at least one output; depicting said input value steps in a graphical window of a graphical user interface of a computer; depicting a matrix of graphically depicted operand and operation rule steps on said graphical user interface, each said graphically depicted operand and operation rule step having assembled rule step code associated therewith and stored within a database coupled to said computer; selecting by a user an operand step from said matrix of graphically depicted operand and operation rule steps and placing said operand result step into said graphical window, said operand step including at least one input; defining a result that will be created when an input to said selected operand step is true; selecting by a user at least one operation step from said matrix of graphically depicted rule steps and placing said at least one operation step into said graphical window at a location interposed between said input value steps and said operand step. said at least one operation step having at least one input and at least one output; connecting by a user said at least one output of each of said input value steps to said at least one input of said operation step, and connecting by a user said at least one output of said operation step to said at least one input of said result step for creating a custom rule.

In stark contrast to claim 18, Mukherjee teaches "the use of rules for determining what graphical interface features should be displayed to a user." Please see column 2, lines 25 through 35. Additionally, Mukherjee teaches that "a scanner and related software that captures data fields from existing paper forms; a database for storing field definitions and their relationships together with rules for determining which user interface features to display at a particular point in a data entry sequence; an inference engine for executing the rules; a graphical user interface component that provides the user with dynamically generated screen configurations based on execution of the rules (which are fired based on inferences drawn from data the user has entered); and a printing component that generates paper and/or electronic forms based on the user's inputs and the execution of the rules. Please see column 2, lines 25 through 51.

Examiner's response:

Paragraph 3 applies. Again from the perspective of the Examiner, the applicant's references anticipate the applicant's disclosure. The operand and operation rules are synonymous with "if-then" rules. Mukherjee also features a user. The comments above apply.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Mukherjee (U. S. Patent 6,314,415, referred to as **Mukherjee**).

Claim 1

Mukherjee anticipates a processor (**Mukherjee**, col 19, lines 34-35), a memory and a display both operatively coupled to said processor (**Mukherjee**, col 19, lines 34-37); a plurality of operand and operation rule steps stored within said memory (**Mukherjee**, col 19, lines 34-37; Examiner's Note (EN): operand and operation are synonymous with "if-then" or generic rules); means for displaying to a user graphical depictions of said plurality of operand and operation rule steps stored within said memory as an arrangement on said display such that said arrangement is comprised of a plurality of individual graphical operand and operation depictions each corresponding to at least one of said operand and operation rule steps (**Mukherjee**, col 19, lines 34-52; col 2, lines 19-38); means for a user to select and interconnect at least two of said

plurality of individual graphical operand and operation for creating a custom rule comprised of operand and operation rule steps corresponding to the user selection of the at least two of said plurality of individual graphical operand and operation depictions (**Mukherjee**, col 2, lines 19-38; EN: the form of Mukherjee is a representation of the rules and the specific characteristics of the form represent rule steps).

Claim 2

Mukherjee anticipates further including a means for displaying a rules window on said display and wherein said means for the user to select and interconnect at least two of said plurality of individual graphical operand and operation depictions includes means for a user to select, drag, and drop the at least two said plurality of individual graphical operand and operation depictions from said arrangement to said rules window and interconnect the at least two of said plurality of individual graphical operand and operation depictions in the rule window for creating said custom rule (**Mukherjee**, col 2, lines 19-61).

Claim 3

Mukherjee anticipates memory is a database wherein said operand and operation rules steps are individually stored as executable code and created custom rule is employed for decision making in an expert system by accessing said executable code for each said rule step that is both graphically depicted and selected for visually creating said custom rule on said display (**Mukherjee**, col 2, lines 19-38; EN: Fig. 3A satisfies this limitation since it is graphic, involves a display and facilitates creation of a

rule(s) as data is appropriately entered; the accessing of executable is generic to computer operations and does not convey novelty or non obviousness).

Claim 4

Mukherjee anticipates a database comprised of a multiplicity of operand and operation rule steps, each said rule step having specific executable code associated therewith (**Mukherjee**, col 2, lines 19-62); a computer operatively coupled to said database and including a display displaying to a user graphical depictions of said multiplicity of operand and operation rule steps stored within said database As an array of a multiplicity of operand and operation rule steps stored within said database as an array of multiplicity of individual graphical operand and operation depictions displayed within a first window on said display and each corresponding to at least one of said multiplicity of operand and operation rule steps; (**Mukherjee**, col 19, lines 34-52); means for displaying a rules window on said display (**Mukherjee**, col 20, lines 1-4); means for a user to interface with said array displayed in said first window to select and place a plurality of said multiplicity of individual graphical operand and operation depictions from said array to said rules window for graphical display (**Mukherjee**, col 19, lines 34-52); and, means for interconnecting plurality of said multiplicity of individual graphical operand and operation depictions displayed in said rules window for creating a custom rule (**Mukherjee**, col 19, lines 63-67; EN: linking of the prompts is a manifestation of rule interconnection).

Claim 5

Mukherjee anticipates including a reference stored within said database for referencing said specific executable code associated with each operand and operation rule step that corresponds to each of said plurality of said multiplicity of individual graphical operand and operation depictions displayed in said rules window (**Mukherjee**, col 2, lines 19-38; EN: executable code is the manifestation of the graphical display in the world of software and does not convey novelty or non obviousness).

Claim 6

Mukherjee anticipates processing means for processing said created custom rule by processing said referenced executable code (**Mukherjee**, col 2, lines 19-38; EN: above comments apply).

Claim 7

Mukherjee anticipates including means for providing a decision based upon said processing of said created custom rule (**Mukherjee**, col 2, lines 19-38).

Claim 8

Mukherjee anticipates means for routing said decision based upon said processing of said created custom rule to appropriate personal (**Mukherjee**, col 4, lines 30-45).

Claim 9

Mukherjee anticipates a database comprised of a multiplicity of operand and operation rule steps, each said rule step having specific executable code associated

therewith (**Mukherjee**, col 19, lines 34-52); a computer operatively coupled to said database and including a display for displaying to a user graphical depictions of said multiplicity of operand and operation rule steps stored within said database as an arrangement of a multiplicity of individual graphical operand and operation depictions displayed in a first window on said display and each corresponding to at least one of said multiplicity of operand and operation rule steps (**Mukherjee**, col 19, lines 34-52); means for displaying a rules window on said display (**Mukherjee**, col 20, lines 1-5); means for individually selecting, dragging and dropping a plurality of said multiplicity of individual graphical operand and operation depictions from said first window to said rules window (**Mukherjee**, col 2, lines 19-38; col 4, lines 8-29; Fig. 3A); means for graphically interconnecting said individual graphical operand and operation depictions in said rules window (**Mukherjee**, col 2, lines 39-62; col 19, lines 62-67), and means for storing said graphically interconnected selected individual graphical operand and operation depictions in said rules window as a custom rule to be employed for decision making in an expert system (**Mukherjee**, col 2, lines 39-62; col 19, lines 62-67).

Claim 10

Mukherjee anticipates a plurality of tables stored within said database, each of said plurality of tables having at least one record including at least one field (**Mukherjee**, col 18, lines 20-47); a plurality of step references stored within at least one of said plurality of tables, each of said plurality of step references associated with at least one of said multiplicity of operand and operation rule steps stored within said database (**Mukherjee**, col 18, lines 14-47); a plurality of rule references stored within at

least one of said plurality of tables, each of said plurality of rule references associated with at least one of said rule step references stored within said database (**Mukherjee**, col 18, lines 20-47), and wherein all of the step references that are associated with the same rule reference define each individual rule step that is included in an individual, user created custom rule (**Mukherjee**, col 18, lines 14-47).

Claim 11

Mukherjee anticipates a plurality of tables stored within said database, each of said plurality of tables having at least one record containing fields (**Mukherjee**, col 18, lines 20-47); a plurality of said fields including step references to individual rule steps stored within said database stored within said database for defining a custom rule (**Mukherjee**, col 2, lines 19-38).

Claim 12

Mukherjee anticipates further including an extraction module for extracting information engendered from sensors and a processor operatively coupled to both said extraction module and said database for processing said extracted information according to said user created custom rule (**Mukherjee**, col 4, lines 8-29; col 2, lines 39-61).

Claim 14

Mukherjee anticipates at least two of said plurality of individual graphical operand and operation depictions include inputs, outputs, or both inputs and outputs and wherein the system further includes means for connecting outputs to inputs for creating said

custom rule. (**Mukherjee**, col 2, lines 19-62; EN: for sure there is an alpha and omega which are generic to one of ordinary skill in the art).

Claim 15

Mukherjee anticipates storing individual operand and operation rule steps comprised of executable code within a database coupled to a computer (**Mukherjee**, col 2, lines 19-62; col 19, lines 34-52); depicting said operand and operation rules steps on a display of said computer as a graphical arrangement of operand and operation icons (**Mukherjee**, col 2, lines 19-62; col 19, lines 34-52; Fig. 3A); creating a user defined custom rule by interfacing with said graphical arrangement of operand and operation icons for selecting and placing a plurality of said operand and operation icons from said graphical arrangement to a graphical window on said display and interconnecting said icons placed within said graphical window (**Mukherjee**, col 2, lines 19-62; col 5, lines 41-56).

Claim 18

Mukherjee anticipates selecting an asset for a custom rule (**Mukherjee**, col 18, lines 20-24); defining input value steps to be used in the custom rule (**Mukherjee**, col 18, lines 20-57); each said input value step including at least one output (**Mukherjee**, col 18, lines 20-57); depicting said input value steps in a graphical window of a graphical user interface of a computer (**Mukherjee**, col 18, lines 20-57); depicting a matrix of graphically depicted operand and operation rule steps on said graphical user interface, each said graphically depicted rule step having assembled operand and operation rule step code associated therewith and stored within a database coupled to

said computer (**Mukherjee**, col 18, lines 20-57; col 2, lines 19-62; col 19, lines 34-52); selecting step from said matrix of graphically depicted operand and operation rule steps and placing said operand step into said graphical window, said operand step including at least one input (**Mukherjee**, col 18, lines 20-57); defining a result that will be created when an input to said selected operand step is true (**Mukherjee**, col 18, lines 20-47); selecting by a user at least one operation step from said matrix of graphically depicted rule steps and placing said at least one operation step into said graphical window at a location interposed between said input value steps and said operand step, said at least one operation step having at least one input and at least one output (**Mukherjee**, col 18, lines 20-47; col 2, lines 39-61); connecting by a user said at least one output of each of said input value steps to said at least one input of said operation step (**Mukherjee**, col 18, lines 20-47), and connecting by a user said at least one output of said operation step to said at least one input of said result step for creating a custom rule (**Mukherjee**, col 18, lines 20-47).

Claim 19

Mukherjee anticipates a database (**Mukherjee**, col 2, line 41); a multiplicity of text identifier numbers stored within said database (**Mukherjee**, col 18, lines 20-47); means for storing a table comprised of text associated with said multiplicity of text identifier numbers (**Mukherjee**, col 18, lines 20-47); means for returning text from said table to said system for each of said multiplicity of text identifier numbers stored within said database upon demand such that said database can be written and stored as said multiplicity of text identifier numbers (**Mukherjee**, col 18, lines 20-47; EN: it is well

known to one of ordinary skill in the art that computers are binary systems and operate on binary numbers; consequently text identifier numbers are encoded in binary numbers).

Claim 20

Mukherjee anticipates said table can be comprised of text in any language (**Mukherjee**, col 1, lines 9-16; col 19, 8-24; EN: Mukherjee is not limited to any specific discipline however it may be defined...Mukherjee is not language specific).

Conclusion

8. The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

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9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence Information

Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner, Joseph P. Hirl, whose telephone number is (703) 305-1668. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anil Khatri can be reached at (703) 305-0282.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,
Washington, D. C. 20231;

or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:

(703) 746-7290 (for informal or draft communications with notation of "Proposed" or "Draft" for the desk of the Examiner).

Hand-delivered responses should be brought to:

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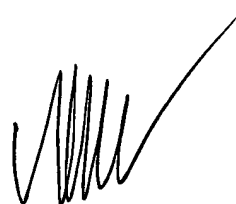
2121 Crystal Drive,

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Joseph P. Hirl



January 6, 2004



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SUPERVISORY PATENT EXAMINER